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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,254	11/15/2001	Thomas E. Hansen	154.008US1	9048

7590 03/30/2004

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EXAMINER	
MAYES, MELVIN C	

ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/000,254	HANSEN ET AL.	
	Examiner	Art Unit	
	Melvin Curtis Mayes	1734	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *11-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

(1)

Applicant's election of Claims 1-10 and 18 in Paper filed January 16, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Terminal Disclaimer

(2)

The terminal disclaimer filed on January 16, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U. S. Patent No. 6,294,038 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Suggested Claim Language

(3)

It is suggested that Claim 1 read "b) microbridged linerless labels is provided and" (or similar language) based on the added language "feeding the composite."

It is suggested that Claim 20 read "printed label prior to..."

Claim Rejections - 35 USC § 112

(4)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

(5)

Claims 5, 6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 does not further limit Claim 1 because the subject matter of Claim 5 is already claimed in Claim 1. In fact, Claim 5 broadens Claim 1 because Claim 1 uses "consisting essentially of" while Claim 5 uses "comprises." Claim 5 should be cancelled and claims dependent therefrom amended to depend from other claims. Claim 10 currently is essentially a duplicate of Claim 7 because they both depend from Claim 2.

Claim Rejections - 35 USC § 103

(6)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(7)

Claims 1-5, 7-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/07883 in view of WO 00/30963, Koehlinger et al. 3,920,122 and Boreali 5,573,621, and

further in view of Evans 3,565,750 and the "Controlling costs challenge label stock, liner suppliers" article.

WO 00/07883 discloses a method of applying linerless labels comprising: providing prerolled linerless labels by providing a stream of linerless labels off a manufacturing liner, partially severing individual labels on the continuous sheets by a die cutter and anvil roller, applying the continuous sheet with severed labels to a temporary, reusable support liner and rolling the label/support composite; associating the source of precut linerless labels on the roll of reusable support liner to a linered label applicator so that a composite of reusable, temporary liner sheet and cut linerless labels is fed to the linered applicator where linered label is normally directed; removing the cut linerless label from the liner sheet and applying to a substrate; and after removal of the label, winding the liner sheet into a roll. The roll is fed to an the applicator which operates by bending the linerless label on the liner to partially remove at least a part of an edge of the label from the liner, having the lifted edge placed into contact with a surface to which the label is to be applied and attaching the label to the surface. Printing of the labels may be done during or after manufacture of the linerless label stock, before or after cutting of the stock or before application of the stock to the support liner (pgs. 5, 11-21). WO '883 does not specifically disclose that the partially severed linerless labels have a border defined by a micro-bridged cut along the border or disclose that the liner sheet has a thickness less than 0.032 mm (1.26 mil).

WO 00/30963 teaches that for dispensing flat forms such as labels from a web-like starting material, dispensing problems of freeing the labels from the remaining punch material (lattice stripping) are avoided by punching the outer contour of the label from the web-like starting material such that at least one point between the label and the rest of the material is not

punched through. The contour of the label is not punched completely from the web-like material, but instead at least one point or just a few points of the contour are not punched, forming tiny bridges between the label and the remains of the web-like material, which bridges function to fix the labels at their position within the web-like material until dispensed. The number and dimensions of the bridges depend on the material properties of the web-like material (as described in US equivalent Schumann et al. 6,571,983, col. 1, line 4 – col. 3, line 38).

Koehlinger et al. teach that the number and dimensions of bridges that are used to support labels on web remnant are dependent upon the nature of the label web material, should provide enough support so that the labels do not fall from the web remnant prior to the time they reach the application stations and be limited in number as much as possible for appearance purposes. Koehlinger et al. teach using bridges of width of 0.015 inches to 0.045 inches (col. 5, line 52 – col. 6, line 68).

Boreali teaches that ties for connecting linerless labels to matrix preferably have a width of 0.0018-0.030 inches (col. 3, lines 64-66).

Evans 3,565,750 teaches that polyolefin film-based low-release liner for temporarily supporting and covering pressure sensitive adhesive carried by a sheet or other article can have thickness of 1-4 mils (col. 1, lines 29-35, col. 2, line 70 – col. 3, line 6).

The "Controlling costs challenge label stock, liner suppliers" article teaches that one of the biggest trends in labels and liners is to use thinner substrate to reduce costs and satisfy environmental need for source reduction while maintaining or improving performance and production levels. The article teaches that thicknesses are going to 1 and 1½ mil.

It would have been obvious to one of ordinary skill in the art to have modified the method of WO '883 for applying linerless labels by providing the continuous sheet of partially severed linerless labels on the temporary liner as labels connected to the continuous sheet by one or a few tiny bridges, as taught by WO '963, to avoid the problems with dispensing labels from a web-like starting material. By providing one or a few punched tiny bridges to connect the linerless labels to the remnant (matrix) of the continuous linerless label sheet, linerless labels having a border defined by a bridges cut along the border are provided on the temporary liner, as claimed.

Providing the bridges as micro-bridges would have been obvious to one of ordinary skill in the art, as WO '0963 teaches that the number and dimensions of the bridges depend on the material properties of the web-like material, and Koehlinger et al. teach that the number and dimensions of bridges that are used to support labels on web remnant are dependent upon the nature of the label web material and should provide enough support so that the labels do not fall from the web remnant prior to the time they reach the application stations and can be of widths of 0.015 inches to 0.045 inches, while Boreali teaches that ties (bridges) for connecting linerless labels to matrix preferably have a width of 0.0018-0.030 inches. By providing bridges of widths as suggested by Koehlinger et al. and Boreali, micro-bridges are provided as claimed which each comprise not more than 3% of the border of a label, as claimed in Claim 2. Providing the bridges to make up less than 10% of the total border of each label, as claimed in Claim 2, would have been obvious to one of ordinary skill in the art, as Koehlinger teach that the number of bridges should be limited in number as much as possible for appearance purposes.

By providing continuous sheet having micro-bridged labels on the temporary liner and removing the labels from the composite of continuous sheet/liner for application to a substrate, matrix is obviously left on the temporary liner when the labels are removed from the liner, as claimed in Claim 3.

It would have been obvious to one of ordinary skill in the art to have further modified the method of WO '883 by providing the support liner as a polymer film of thickness as low as 1 mil (0.025 mm), as taught by Evans, as release line that can be used to temporarily support and cover pressure sensitive adhesive carried by a sheet or other article and, as taught by the "Controlling costs..." article, as thickness being used for labels and liners to reduce costs and satisfy environmental need for source reduction while maintaining or improving performance and production levels. The use a polymer film release liner of thickness as low as 0.025 mm would have been obvious to one of ordinary skill in the art to reduce costs while still providing a liner able to temporarily support pressure sensitive adhesive carrying material such as labels, as taught by Evans and the "Controlling costs..." article.

(8)

Claims 6, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 5 and 18 above, and further in view of Nedblake 6,592,693.

WO '883 discloses that printing of the labels may be done during or after manufacture of the linerless label stock, before or after cutting of the stock or before application of the stock to the support liner. The references do not disclose providing the polymer release liner of less than 0.025 mm (0.98 mil) in thickness.

Nedblake teaches that in making a label bearing web of labels on a liner, low cost, lightweight liners can be used as opposed to heavier webs typically required in label die cutting systems if the label web is cut while separated from the liner. Nedblake teaches that liner webs on the order of 0.75 mil (0.019 mm) can be used as compared to conventional liner webs of thickness of 2-3 mils, which represents a considerable material savings (col. 2, lines 54-57, col. 4, lines 30-36).

It would have been obvious to one of ordinary skill in the art to have modified the method of the references as combined by providing the polymer release liner of thickness on the order of 0.75 mil (0.019 mm), as taught by Nedblake, as liner web that can be used when the label web is cut while separated from the liner web and to use low cost, lightweight liner as opposed to heavier liner which results in considerable material savings.

Response to Arguments

(9)

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection, applied because of the amendment limiting the liner sheet to a sheet consisting essentially of a sheet of thickness less than 0.032 mm in thickness.

Applicant argues that none of the references suggest the use of ultrathin liners in combination with labels or recognize the problems associated with the use of ultrathin liners with labels. Applicant argues that the use of a thin liner saves material costs and reduces pollution and that the only known use of such thin liner is for roofing shingles. Applicant argues that no one

has been able to provide a solution to using a thin liner without any cutting impact on the liner by first cutting the label before associating with the liner.

(10)

As taught by Evans, the "Controlling cost..." article and Nedblake, the use of release liner as thin as 1 mil (0.025 mm) or 0.75 mil (0.019 mm) is taught or suggested for the same reason as argued by Applicant, to reduce costs and satisfy environmental need for source reduction. This desire to decrease liner thickness to lower costs is further reiterated by the "Cost savings through raw material efficiency" article cited of interest. The use of 1 mil polymer liner to support label facestock is also taught by the Packworld.com article cited of interest, which tends to supports Applicant's own admission of the use of 1.02 mil and 0.7 mil liner (pg. 9, lines 25-28). Thus it is incorrect, as argued, that the use of ultrathin liner for labels has not been suggested or that the only known use for ultrathin liner is for roofing shingles.

As to the problem of using ultrathin liner during label processing without cutting the liner, Nedblake teaches a same or similar solution to a problem as argued by Applicant as uniquely solved by Applicant. Nedblake also teaches cutting label web into labels while it is separated from the liner which allows the use of lower cost, thinner liner.

Conclusion

(11)

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(12)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

(13)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melvin Curtis Mayes
Primary Examiner
Art Unit 1734

MCM
March 22, 2004